

WHAT IS CLAIMED AS INVENTION IS:

1. A magnetostirctive device, comprising:
a waveguide, said waveguide being folded and forming two substantially parallel legs;
a mode converter, said mode converter surrounding at least a portion of at least one of said legs of said waveguide; and
said legs being electrically insulated from each other.
2. The device of claim 1, wherein said legs being electrically insulated from each other; said fold of said waveguide is located at the farthest distance from said mode converter; supports a sonic pulse in response to a current pulse applied to said waveguide; and
3. The device of claim 1 which uses a current pulse applied to said waveguide to generate a sonic pulse in response to the current pulse, the sonic pulse being supported by the waveguide, wherein said mode converter supplies an electrical output in response to the sonic pulse traveling down said waveguide.